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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,912	12/06/2004	Hitoshi Horiuchi	DK-US045259	8718
22919 . 7590 12/21/2006 GLOBAL IP COUNSELORS, LLP			EXAMINER	
1233 20TH ST	REET, NW, SUITE 700		HAMO, PATRICK	ATRICK
WASHINGTO	N, DC 20036-2680		ART UNIT	PAPER NUMBER
	•		3746	
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
2 MONTHS		12/21/2006	DADED	

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		A				
	Application No.	Applicant(s)				
	10/516,912	HORIUCHI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Patrick Hamo	3746				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet w	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period  Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 136(a). In no event, however, may a will apply and will expire SIX (6) MOI e, cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 06 L	December 2004.					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	☐ This action is <b>FINAL</b> . 2b)☑ This action is non-final.					
3) Since this application is in condition for allowa	ince except for formal mat	ters, prosecution as to the merits is				
closed in accordance with the practice under	Ex parte Quayle, 1935 C.[	D. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-6</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-6</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on <u>06 December 2004</u> is/a	are: a)⊠ accepted or b)□	objected to by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct						
11) The oath or declaration is objected to by the E	xaminer. Note the attache	d Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreigr a)⊠ All b)□ Some * c)□ None of:	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ol><li>Copies of the certified copies of the prior</li></ol>	rity documents have beer	received in this National Stage				
application from the International Burea	` ` ' '					
* See the attached detailed Office action for a list	of the certified copies not	received.				
	٠					
Attachment(s)	<b></b> □	2				
X Notice of References Cited (PTO-892)   X Notice of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) s)/Mail Date				
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/6/04, 9/23/05.		nformal Patent Application				
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#### **DETAILED ACTION**

## Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "TWO-PUMP UNIT WITH DUAL OPERATION MODES".

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoyama, 5,199,854.

Aoyama discloses a pumping system with two pumps of fixed displacement, the displacement of a first pump Q1 larger than that of the second pump Q2, discharge lines 38a and 38b connected to the first and second pumps, respectively, an engine 36 driving both pumps, switch valves 42 and 43 used to selectively dump the discharge from the first and second pumps, connecting the discharge lines when neither is dumping and disconnecting the discharge lines when either one of two is dumping, a pressure control valve that inherently detects a pressure arranged upstream of the pumps, which detects the pressure of only the second discharge line when the first switch valve is commanded to dump the discharge of the first pump (see figure 9), and

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a discharge control valve circuit 50 that controls the switch valves 42 and 43 in a variety of modes as shown in figure 9, including a mode (a) in which the first discharge line is being dumped and the first pump is unloaded, and another mode (b) in which both discharge lines are connected to each other, the discharge control valve circuit 50 responding to a rotational speed sensor 56 mounted on the drive shaft 36A of engine 36. The discharge control valve circuit and the pressure control valve work in concert to determine the mode of operation of the two-pump system (col. 10, l. 12—col. 12, l. 31), together forming a unitary control device. At low pressure and low rotational speed of the motor, the pumps are disconnected into one of the modes represented by either figure 9(a) or figure 9(c), and at high pressure and high rotational speed of the motor, to the mode represented by figure 9(b). Furthermore, the control means includes an input for the amount of fluid required to be supplied from the pumps, which is inherently a function of the rotational speed, and the discharge pressure, this input used to determine the operation mode of the pump system (col. 4, l. 18—col. 5, l. 2).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Hamo whose telephone number is 571-272-3492. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on 571-272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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EHUD GARTENBERG SUPERVISORY PATENT EXAMINER

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